

## Preparing the video in a VOB file for the encoding process – PAL

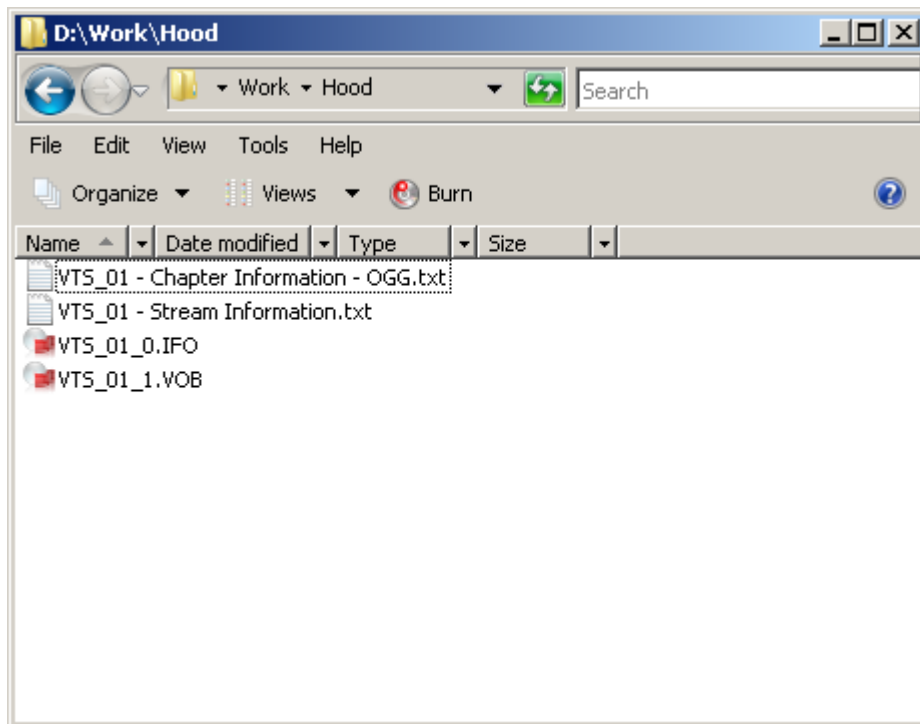
In this chapter we are going to look how to prepare the video in a VOB file so we can use it for the encoding process. Please note that the method described below will only work under Windows XP and Windows Vista operating systems due to a limitation of one of the tools used.

This particular guide is for PAL-format DVDs only. NTSC-format DVDs need some other steps to prepare and will be discussed in a separate chapter.

We need the following tools:

- DVD2AVI
- VFAPICnv
- VirtualDub

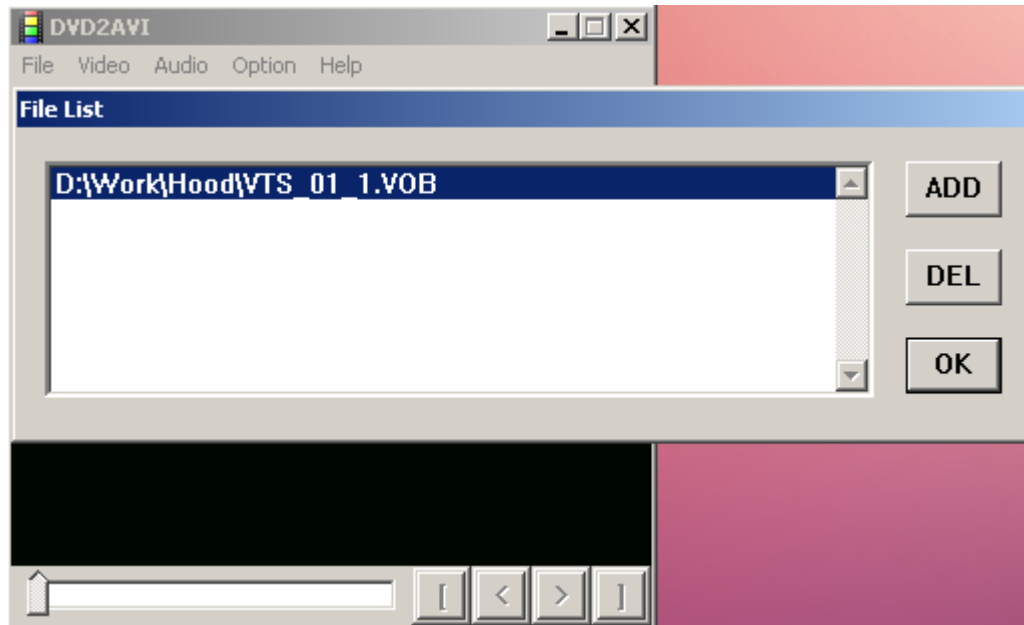
Let's look at the files we have after copying the DVD to your hard disk:



For the encoding process we are going to stream (or frame-serve) the video that's in the VOB file to Composer. We are not going to convert the video to AVI or any other format first, you will not use any more disk space for the video than that is currently being used by the VOB file.

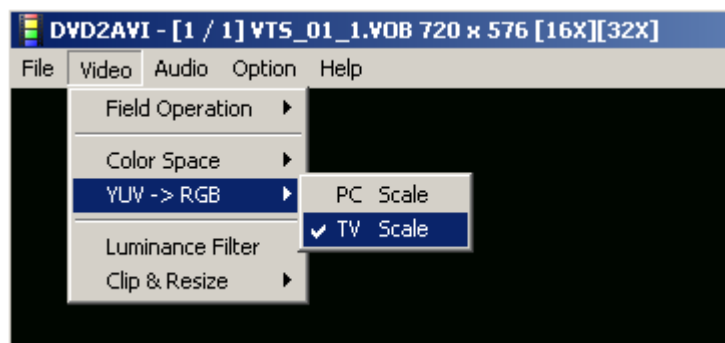
As preparation we will first run the video through DVD2AVI and VFAPICnv to create a file that can be loaded into VirtualDub. We then use VirtualDub to frame-serve the video to Composer.

Let us now first take a look at DVD2AVI and the settings we need. When you start DVD2AVI the video menu is grayed out. We have to load the VOB file first before we can change any settings. Load the VOB file via the menu **File->Open** or by pressing **F3**, select the VOB file and click **Open**.

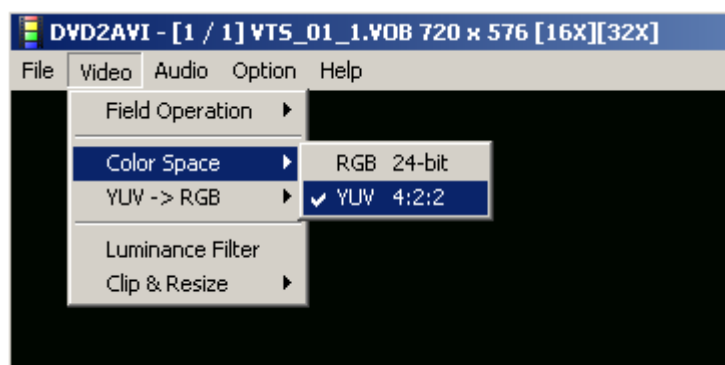


Then click **OK**.

The VOB loads and we now can set a few options. First in the **Video->YUV-RGB** menu select the **TV Scale** setting:

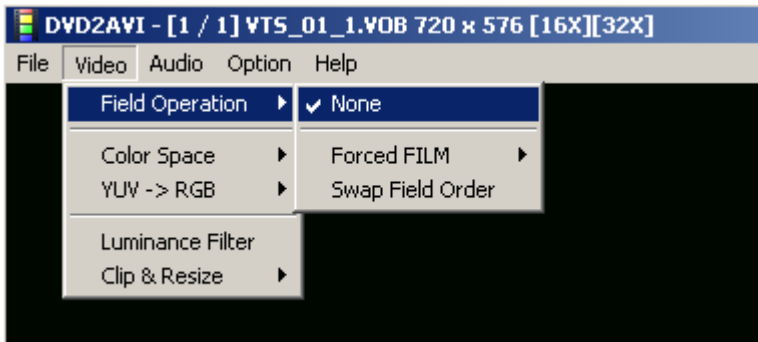


Then in the **Video->Color Space** menu select the **YUV 4:2:2** setting.



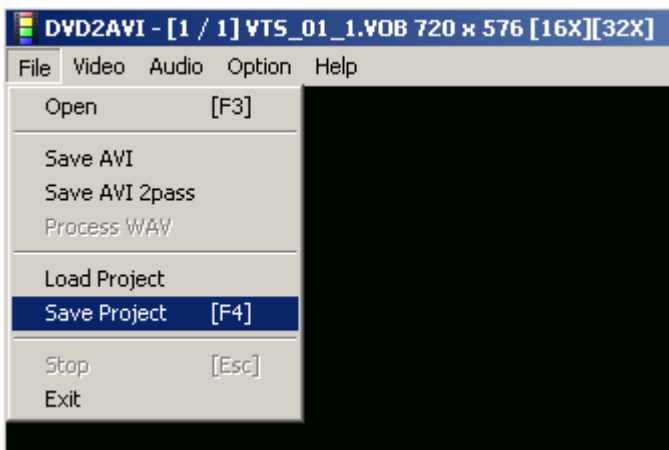
After this we need to make a setting that is very specific to PAL format movies.

In the **Video->Field Operation** menu select the **None** setting.

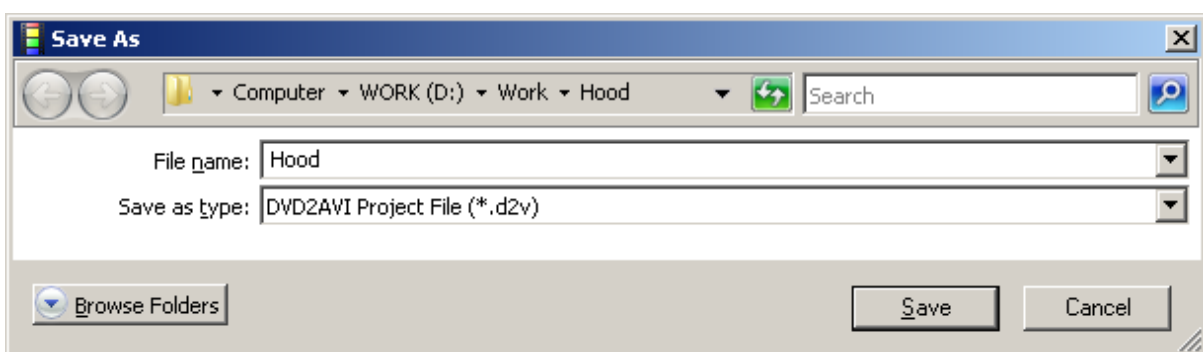


No other settings need to be changed and we can begin the process of creating a D2V project file. This D2V file will be used as input for the next step.

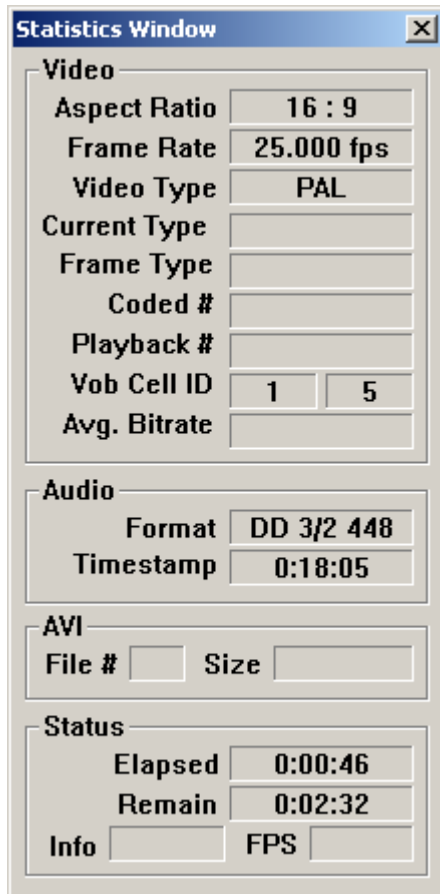
We can start the process simply by choosing **Save Project** from the **File menu** or by pressing **F4**.



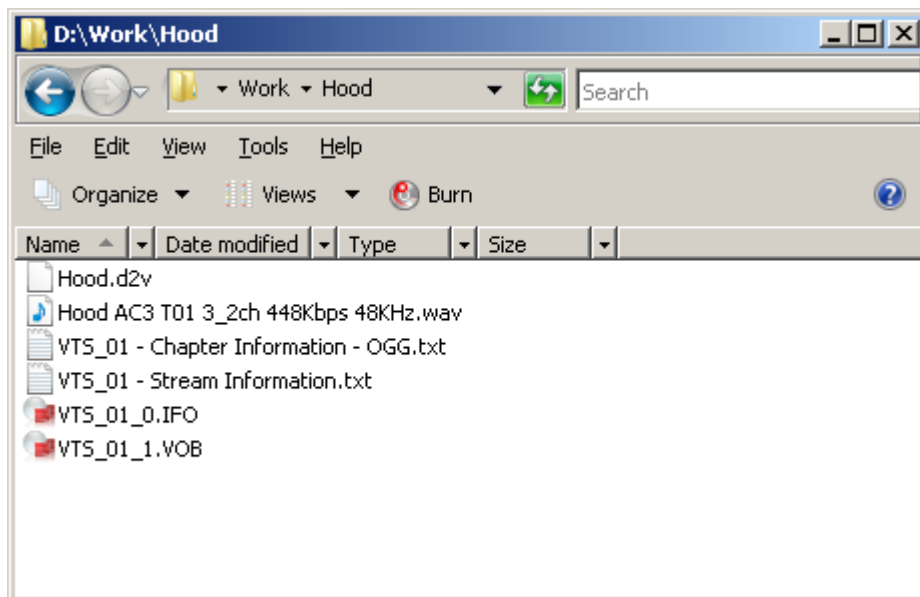
It requests you to enter a filename. Do not choose anything complicated. I usually give it the same name as the folder I'm working from, in this case **Hood**.



Click **Save** and the processing will start. This can take a few minutes and progress can be followed in the statistics window:



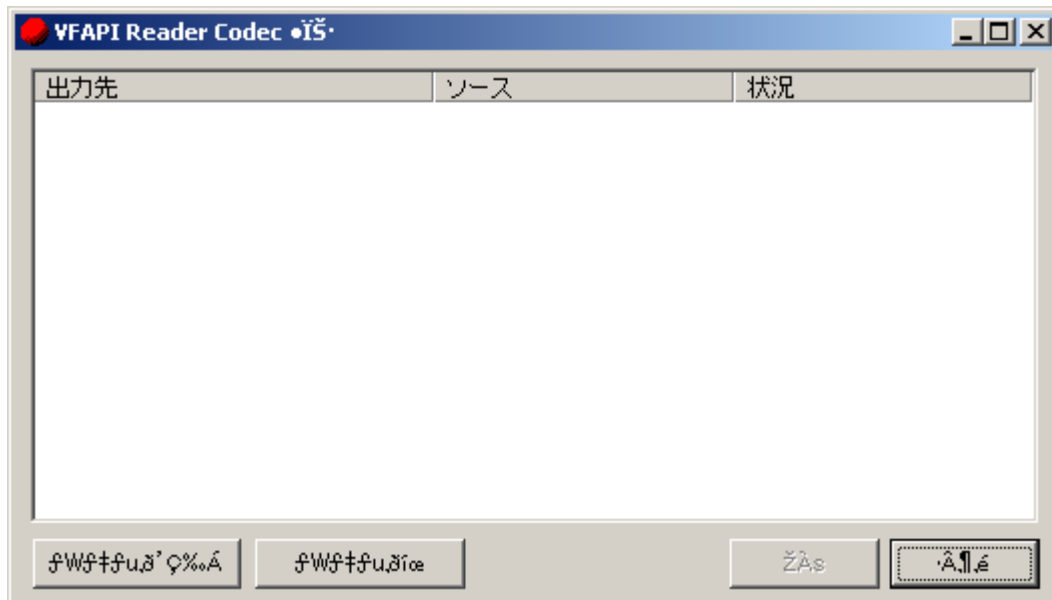
The result will be a [filename].D2V file and a WAV file that contains the movie's audio track.



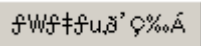
I will not discuss the why and how of the audio track here, please see the chapter on preparing the audio for encoding for that.

We will now take a look at the next step for video preparation: VFAPICnv

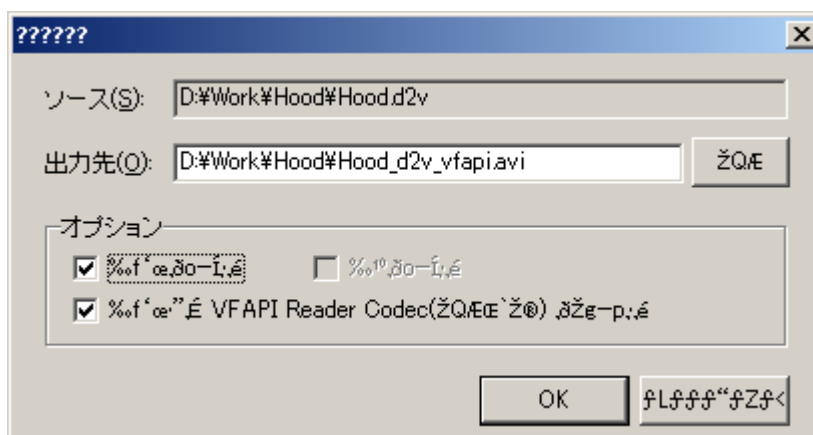
VFAPICnv is a little tricky tool. It needs to be setup in a specific way (see another chapter for that) and it is also the reason why this process no longer works under Windows 7... because VFAPICnv doesn't work under Windows 7. Possibly there are other tools that work to the same effect that do work under Windows 7, however I have not looked into that, and are still happily using VFAPICnv. There actually are a few tricks to still use it on a Windows 7 computer, but that's outside of the scope of this document. Anyway, let's start it and see what it looks like.



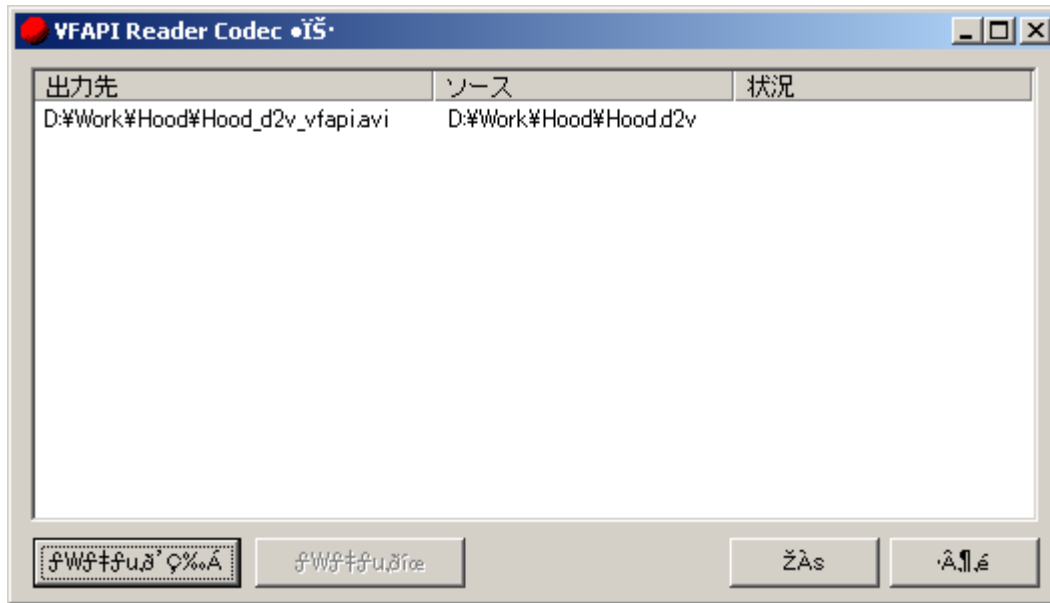
Oh my, it's in Japanese, and only shows rubbish! No worries, it works fine anyway. There is an English version of this tool as well, however it works pretty simple so I never bothered changing.

Click the bottom left button, here depicted as . Then find and select your recently created .D2V file and click **Open**.

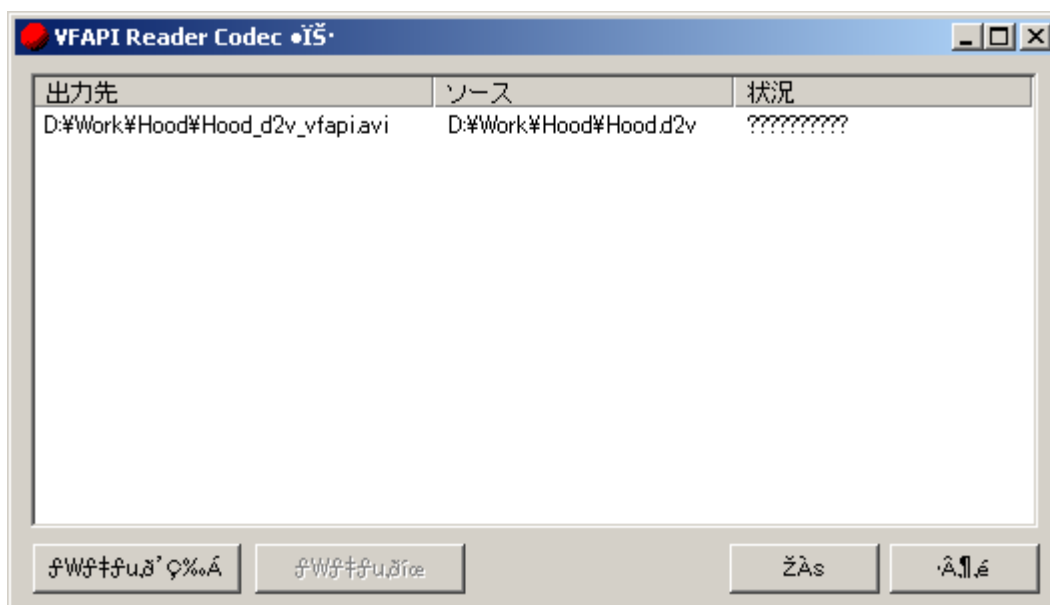
It asks you to confirm



Click **OK**.

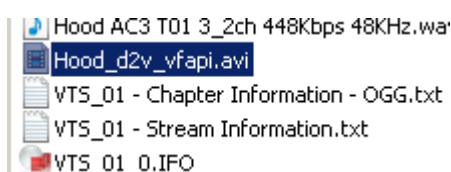


The third button, **スタート**, has now become activated. Click it to start the processing.

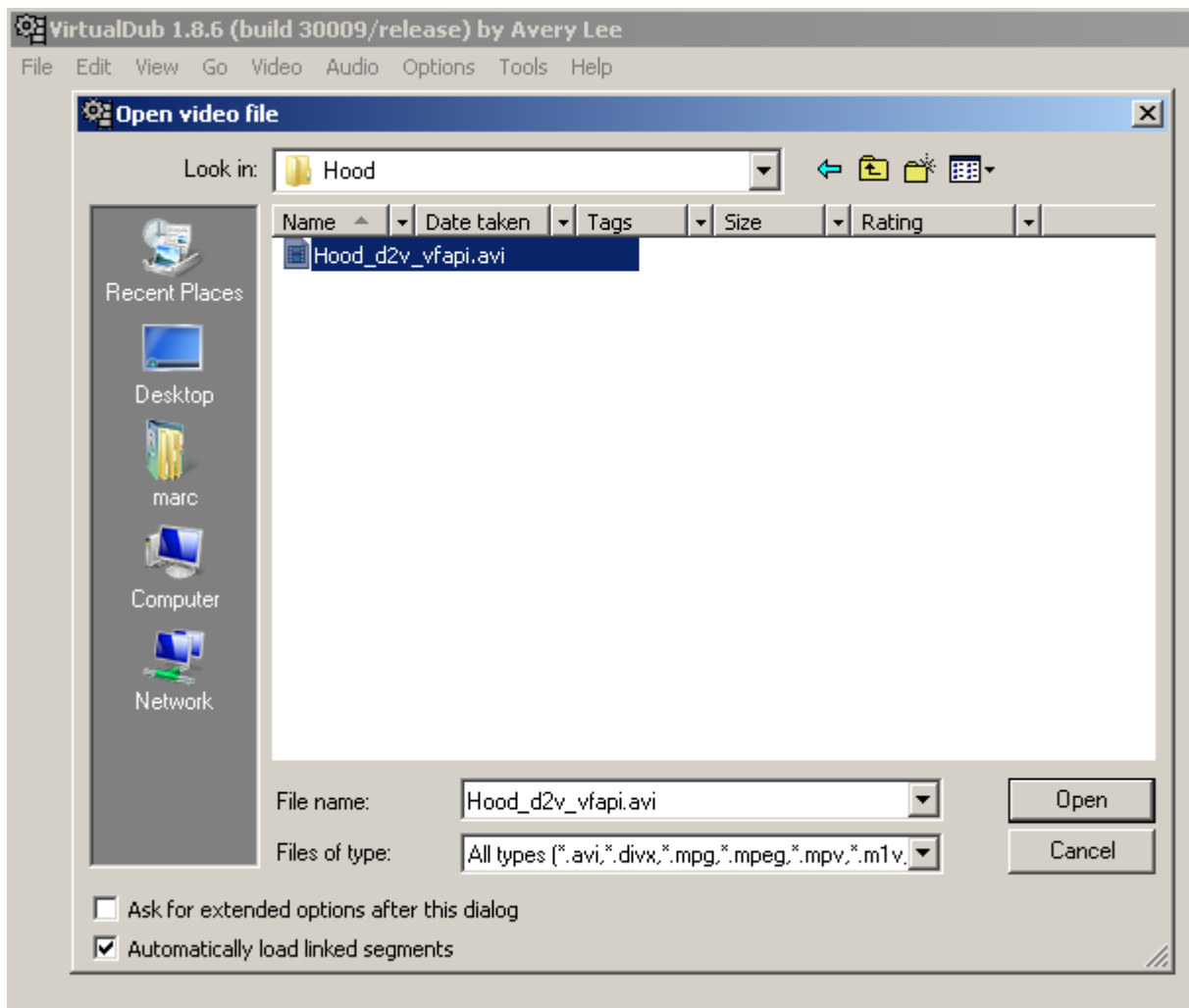


The ?????????? mark that the process has completed. Click the bottom right button, **終了**, to close the tool.

When you look in your work folder you see that another new file has appeared, a file called [filename]\_d2v\_vfapi.avi . This will be your input file for VirtualDub.



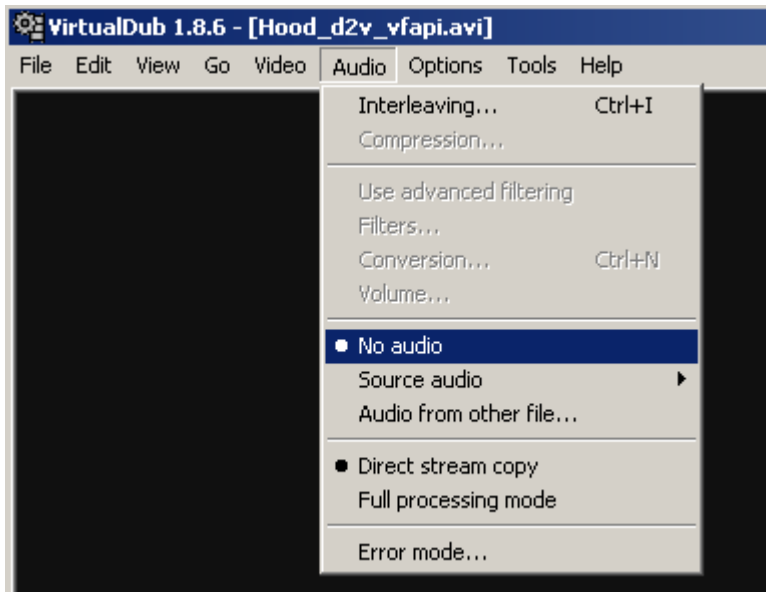
Time to start VirtualDub. After starting it select **File->Open**. Then find and select the [filename]\_d2v\_vfapi.avi file that you just created with VFAPICnv. After that click **Open** to load the file into VirtualDub.



The movie is loaded. You can check it by moving the slide bar at the bottom of the screen. Don't worry about the Aspect Ratio at this point.

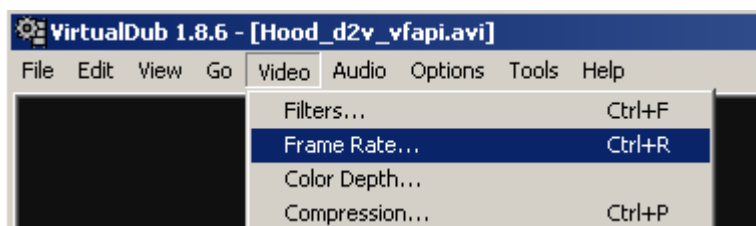


We now need to change a few settings in VirtualDub to make sure the video gets frame-served to composer in the correct way, after we have done that we will start the frame-server. First go to the Audio menu and select **No Audio**.

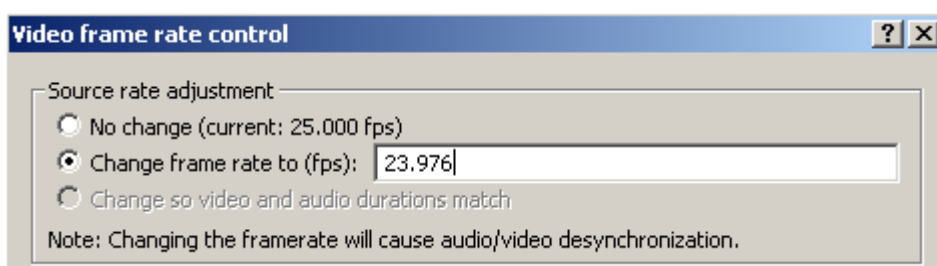


We don't need VirtualDub to serve the audio as Composer will use WAV files as its source. There are some things we need to do here in preparation for the audio track(s) however, and these need to be done before this step is done, so before the audio is disabled in VirtualDub and before the video frame-server is started. More information about this in the chapter on preparing the audio files.

Next we go to the **Video->Frame Rate...** menu.



Here we have to convert the frame rate from PAL (25) to NTSC (23.976) as the PSP can only show NTSC video.



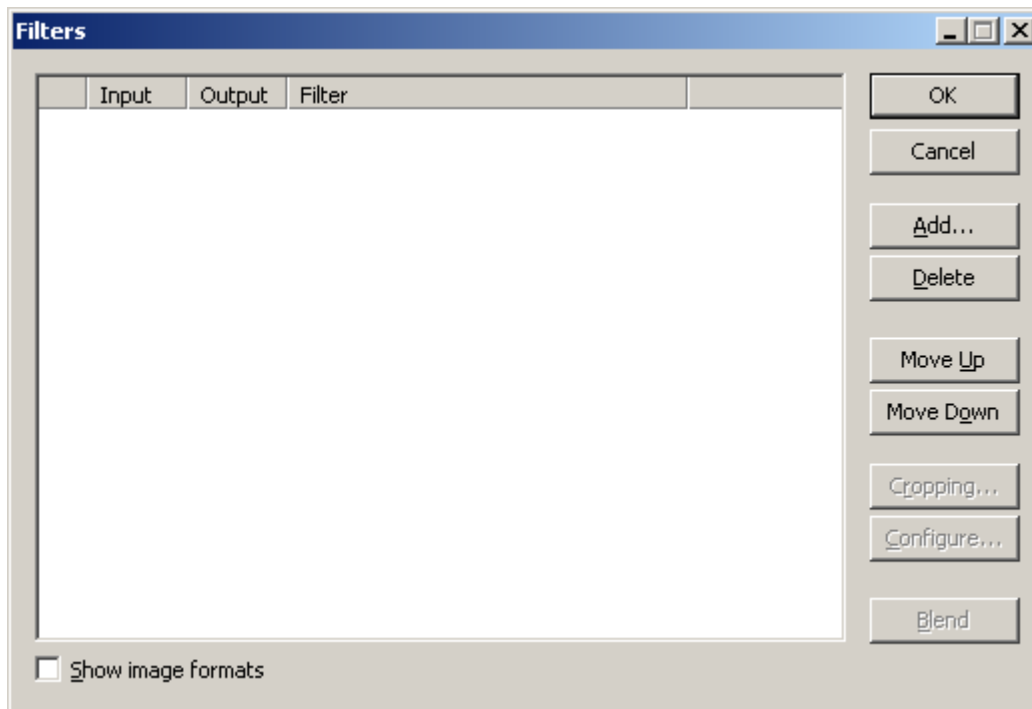
Select **Change frame rate to (fps)** and enter the value **23.976**.

There are no other settings in this menu that need to be changed.

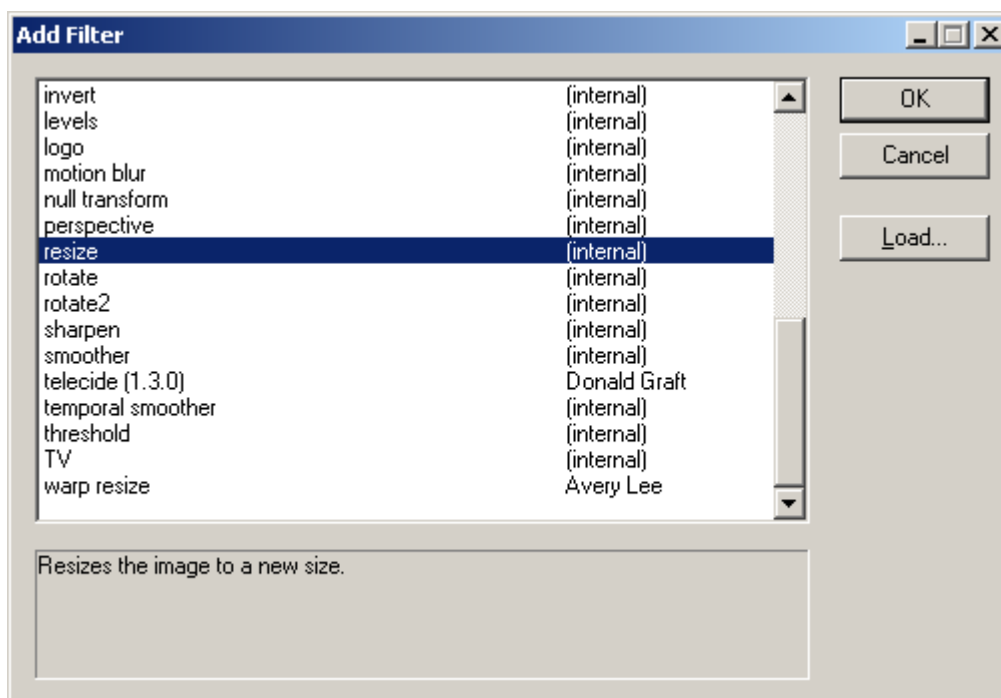
Click **OK**.



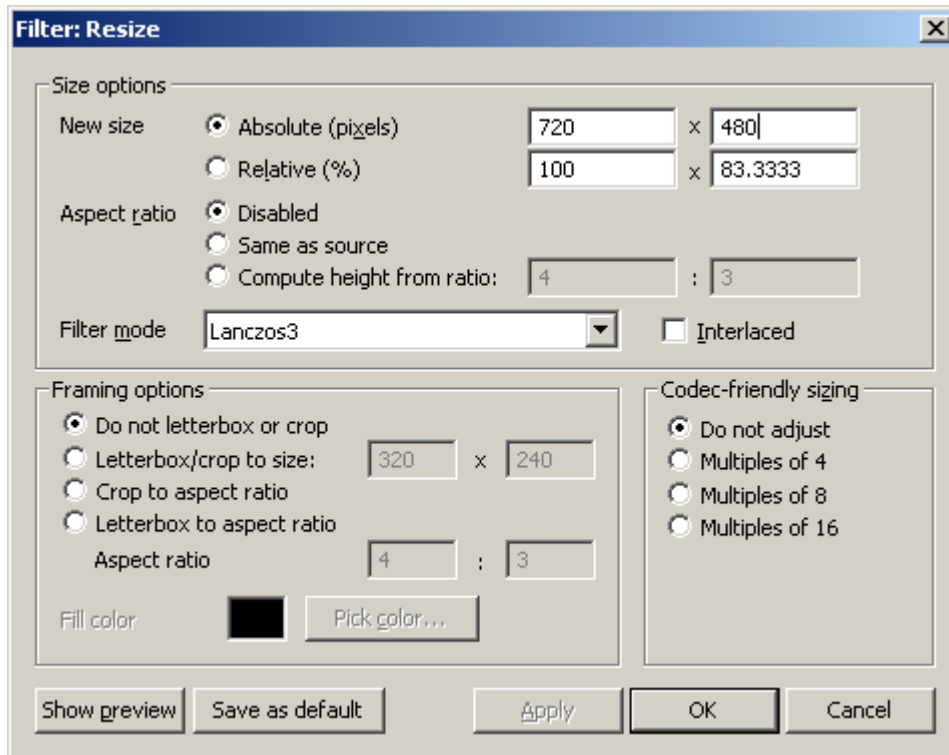
Next go to the **Video->Filters...** menu. You will find an empty window.



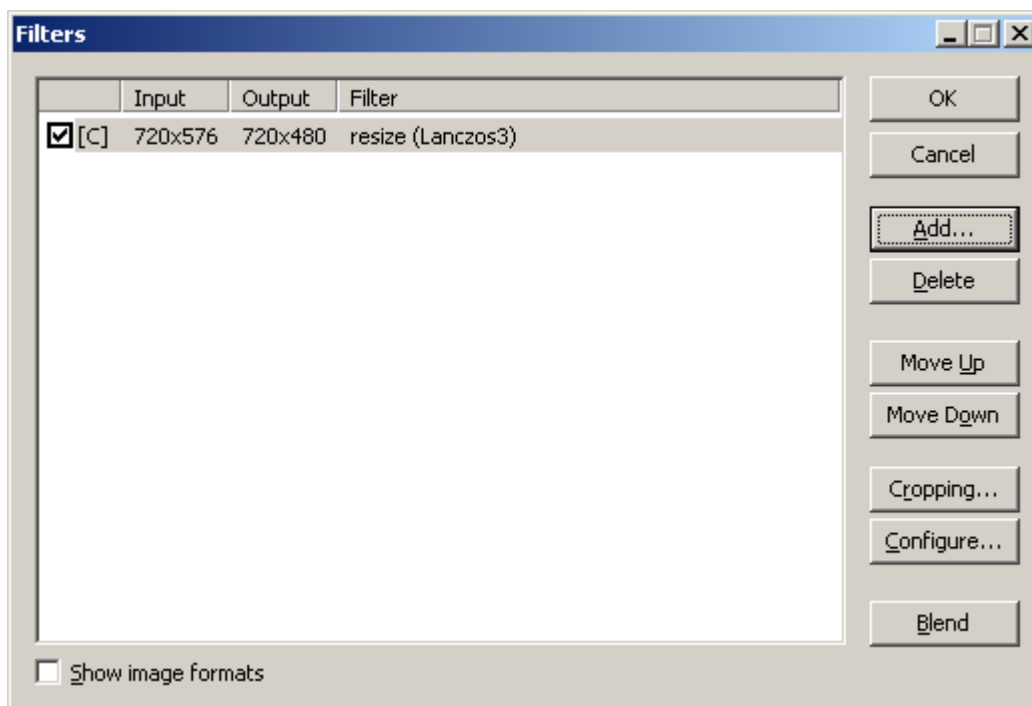
Click **Add...** and select **resize** from the list, then click **OK**



PSP video needs a size of 720x480 (NTSC). PAL is 720x576 and is too large, so we will need to resize it to 720x480. Use the following settings to resize the video and then click **OK**.



Your Filter will be confirmed and shows in the list of filters:

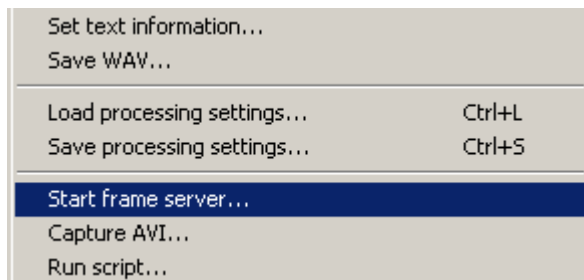


Click **OK** to continue.

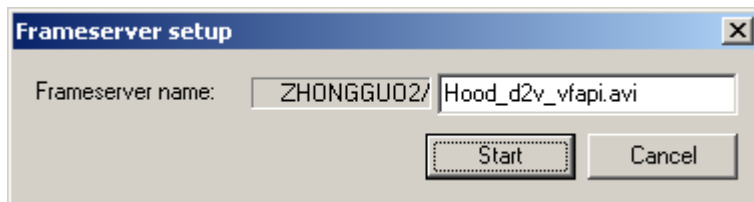
Basically the Resize filter is the only filter you need for PAL movies. However feel free to experiment with any of the other available filters to see if video quality can be further improved.

A filter like **Deinterlace** is not needed for PAL movies.

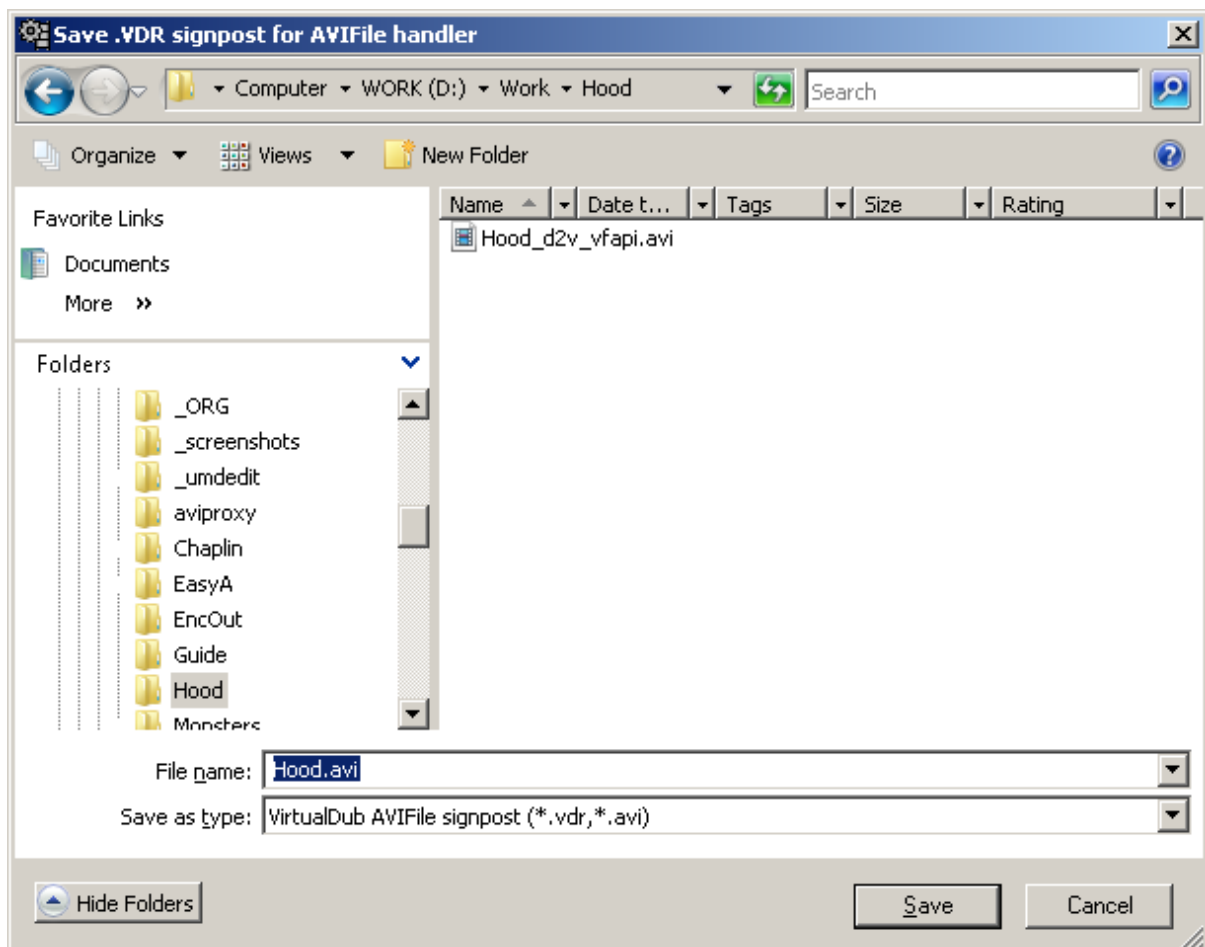
Now we have disabled the audio, set the frame rate and selected the filters we can start the frame server. Select **File->Start frame server...**



Next it should show your [filename]\_d2v\_vfapi.avi file. Click **Start**.



It will now ask you to give a signpost file.



You can give *any* filename here, however pick something that's easy to remember and **\*make sure\*** that you add **.avi** to your filename! If not then it will save as a **.vdr** file, which cannot be used.

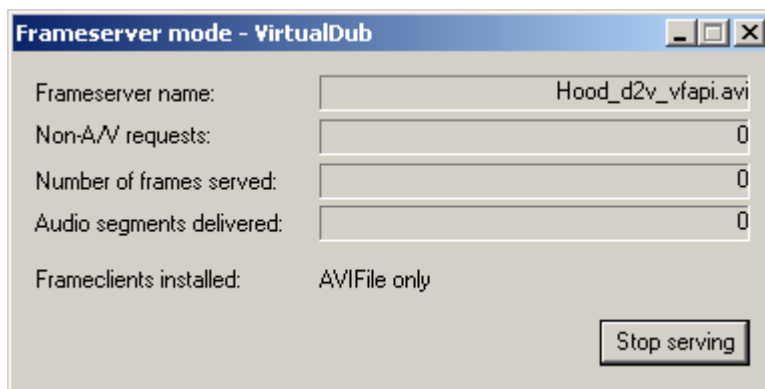
I usually call this **.avi** the first letter of the work folder plus a 1, so for this example I would call it **H1.avi**. Likewise I would use **HT.avi** for test encodes and **HM.avi** for menu encodes. So I would take the first letter of the work folder and would either add a 1, a T, or a M. However for clarity of this document I have called it **Hood.avi** here. Just name it something that is easy for you.

Make sure you select the correct work directory as destination for this file.

The **.avi** file that you specify here, the signpost file, will be used as video input in Composer.

Click **Save**.

The frame server starts.



You will have to leave this window open during the complete Composer encoding process.